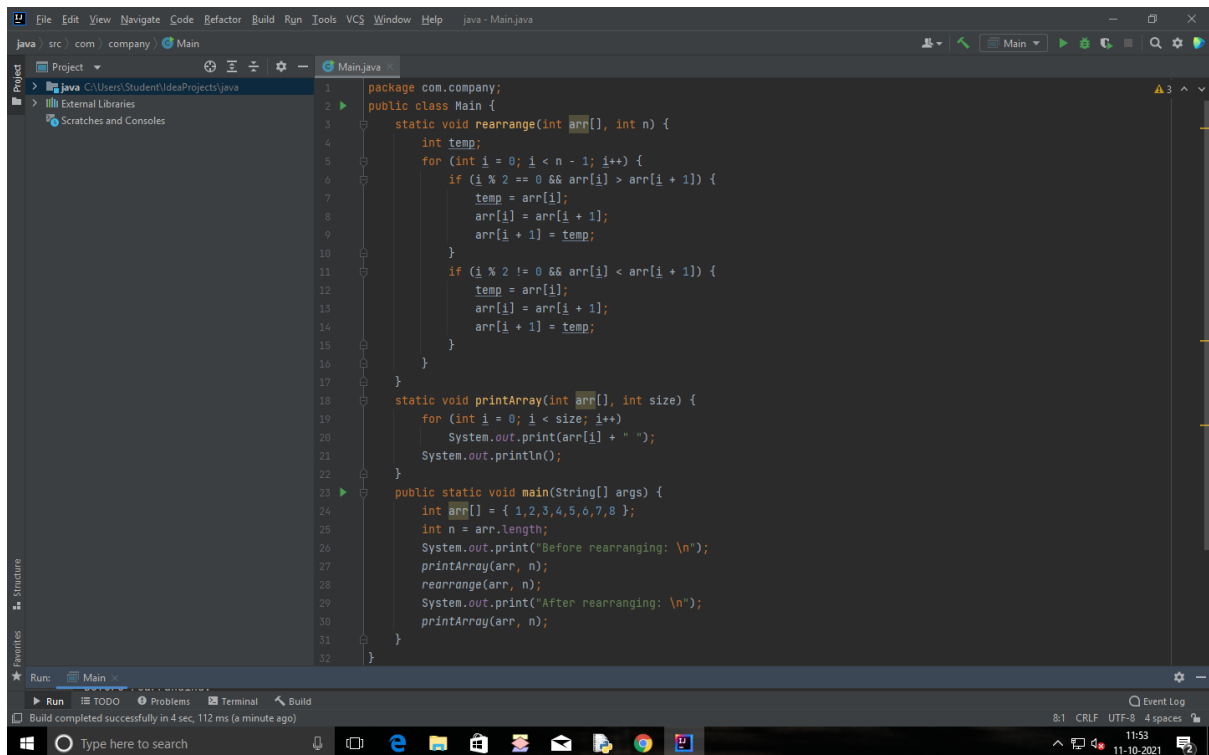


1.)Design an algorithm that rearranges the elements of an array so that all those originally stored at odd suffixes are placed before those at even suffixes

Input : 8

1 2 3 4 5 6 7 8

Output :1 3 5 7 2 4 6 8



The screenshot shows an IDE window titled 'Main.java' with the following Java code:

```
1 package com.company;
2 public class Main {
3     static void rearrange(int arr[], int n) {
4         int temp;
5         for (int i = 0; i < n - 1; i++) {
6             if (i % 2 == 0 && arr[i] > arr[i + 1]) {
7                 temp = arr[i];
8                 arr[i] = arr[i + 1];
9                 arr[i + 1] = temp;
10            }
11            if (i % 2 != 0 && arr[i] < arr[i + 1]) {
12                temp = arr[i];
13                arr[i] = arr[i + 1];
14                arr[i + 1] = temp;
15            }
16        }
17    }
18    static void printArray(int arr[], int size) {
19        for (int i = 0; i < size; i++)
20            System.out.print(arr[i] + " ");
21        System.out.println();
22    }
23    public static void main(String[] args) {
24        int arr[] = { 1, 2, 3, 4, 5, 6, 7, 8 };
25        int n = arr.length;
26        System.out.print("Before rearranging: \n");
27        printArray(arr, n);
28        rearrange(arr, n);
29        System.out.print("After rearranging: \n");
30        printArray(arr, n);
31    }
32 }
```

The IDE interface includes a Project Explorer on the left showing the file structure, a Run console at the bottom, and a Windows taskbar at the very bottom.

